

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/004,719

12/04/2001

Stephen P. Claussen

60680-553

1202

26127

7590

02/06/2004

DYKEMA GOSSETT PLLC  
39577 WOODWARD AVENUE  
SUITE 300  
BLOOMFIELD HILLS, MI 48304-5086

EXAMINER

OEN, WILLIAM L

ART UNIT

PAPER NUMBER

2855

DATE MAILED: 02/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/004,751

Applicant(s)

CLAUSSEN ET AL.

Examiner

Ex. Dickens

Art Unit

2855

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 03 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 16-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 16-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker et al. (US Patent 5,409,045) in view of McGhee (US Patent 5,505,080). With respect to claims 16 and 23, Walker et al. discloses a method of determining a tire pressure in a vehicle tire comprising the steps of: ascertaining a first fluid pressure in a conduit disposed between a fluid source and said tire (col. 9, lines 13-16); comparing said first fluid pressure to a target pressure (col. 10, lines 19, 20); incrementing a counter when said first fluid pressure is less than said target pressure (col. 6, lines 14-23); comparing said counter to a predetermined value (Figs. 5, 5A); providing a pulse of compressed fluid to said conduit when said first fluid pressure is less than said target pressure and said counter is less than said predetermined value, said pulse having a duration determined responsive to a duration of a previous pulse of compressed fluid provided to said conduit (Figs. 5, 5A) and a change in pressure in said conduit resulting from said previous pulse; and, repeating said ascertaining, comparing, and providing

steps until said first fluid pressure in said conduit reaches said target pressure or said counter reaches said predetermined value (Figs. 5, 5A, 6). However Walker et al. does not disclose using a sensor disposed in a conduit. McGhee discloses a sensor 156 disposed in a conduit (Fig. 3) for the purpose of measuring the pressure within the conduit (col. 7, lines 59-61). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a sensor disposed in a conduit in Walker et al. as taught by McGhee for the purpose of measuring the pressure within the conduit (col. 7, lines 59-61).  
Claims 17, 24: Walker et al. discloses wherein said first fluid pressure is ascertained following a predetermined hold time that begins after said previous pulse is provided to said conduit (col. 7, lines 47-49);  
Claims 18, 25: Walker et al discloses wherein said duration of said previous pulse is a preset period (col. 7, lines 47-49) ;  
Claims 19, 26: Walker et al discloses wherein said duration of said pulse is determined in accordance with the following formula:  $D_1 = n * D_0 * [P_T - \text{temp}_1] / (\text{temp}_1 - P_L)$   
wherein n is a predetermined value,  $D_0$  is said duration of said previous pulse,  $P_T$  is said target pressure,  $\text{temp}_1$  is said first fluid pressure and  $P_L$  is a previous fluid pressure in said conduit resulting from said previous pulse (Figs. 5, 5A, 6);

Claims 20, 27: Walker et al discloses determining a second fluid pressure in said conduit following a predetermined line leak hold time; and, comparing said first and second fluid pressures (Figs, 5, 5A);

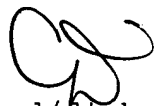
Claims 21, 28: Walker et al discloses wherein said tire pressure equals said first fluid pressure if a difference between said first and second fluid pressures is less than a predetermined amount (col. 10, lines 25-35);

Claims 22, 29: Walker et al discloses logging a line leak fault if a difference between said first and second fluid pressures is greater than a predetermined amount (col. 5, lines 57-64).


3. Applicants' arguments filed 9/3/03 have been fully considered but they are not persuasive. Applicants argue Walker et al. discloses adjusting the pressure in the conduit when the pressure is greater than the target pressure. In col. 9, lines 46, 47, Walker et al. discusses adding a fluid pressure lower than desired pressures. Applicants go on to argue, McGhee does not disclose or suggest any control algorithms for monitoring or controlling tire pressure. To this the Examiner asserts, McGhee is used to teach the claimed limitation of a sensor located within a conduit. Accordingly, the modified Walker et al. clearly teach and/or suggest the claimed limitations. All of applicants' arguments are not deemed to be persuasive. **THIS**

**ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Dickens or the supervisor, Edward Lefkowitz, whose telephone number is (703) 305-7047 or 305-4816, respectively.



cd/dickens  
December 11, 2003



EDWARD LEFKOWITZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800